 TRANSMITTAL FORM	Attorney Docket No. BC9-99-047/1455P
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In re the application of: **BRUNHEROTO, et al.**

Confirmation No: **9149**

Serial No: **09/602,278**

Group Art Unit: **2611**

Filed: **June 23, 2000**

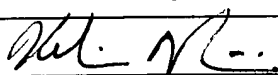
Examiner: **Saltarelli, Dominic D.**

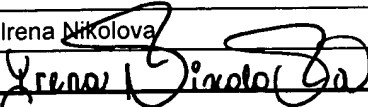
For: **Method and System for Automated Monitoring of Quality of Service of Digital Video Material Distribution and Play-Out**

ENCLOSURES (check all that apply)			
<input type="checkbox"/>	Amendment/Reply	<input type="checkbox"/>	Assignment and Recordation Cover Sheet
<input type="checkbox"/>	After Final	<input type="checkbox"/>	Part B-Issue Fee Transmittal
<input type="checkbox"/>	Information disclosure statement	<input type="checkbox"/>	Letter to Draftsman
<input type="checkbox"/>	Form 1449	<input type="checkbox"/>	Drawings
<input type="checkbox"/>	(X) Copies of References	<input type="checkbox"/>	Petition
<input type="checkbox"/>	Extension of Time Request *	<input type="checkbox"/>	Fee Address Indication Form
<input type="checkbox"/>	Express Abandonment	<input type="checkbox"/>	Terminal Disclaimer
<input type="checkbox"/>	Certified Copy of Priority Doc	<input type="checkbox"/>	Power of Attorney and Revocation of Prior Powers
<input type="checkbox"/>	Response to Incomplete Appln	<input type="checkbox"/>	Change of Correspondence Address
<input type="checkbox"/>	Response to Missing Parts	*Extension of Term: Pursuant to 37 CFR 1.136, Applicant petitions the Commissioner to extend the time for response for xxxxx month(s), from to .	
<input type="checkbox"/>	Executed Declaration by Inventor(s)		

CLAIMS					
FOR	Claims Remaining After Amendment	Highest # of Claims Previously Paid For	Extra Claims	RATE	FEE
Total Claims	0	0	0	\$ 50.00	\$ 0.00
Independent Claims	0	0	0	\$200.00	\$ 0.00
Total Fees					\$ 0.00

METHOD OF PAYMENT	
<input type="checkbox"/>	Check no. _____ in the amount of \$ _____ is enclosed for payment of fees.
<input checked="" type="checkbox"/>	Charge any fees or credit any overpayment to Deposit Account No. <u>09-0460</u> (IBM Corporation)

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Attorney Name	Kelvin M. Vivian, Reg. No. 53,727
Signature	
Date	August 11, 2005

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 11, 2005	
Type or printed name	Irena Nikolova
Signature	



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

APPEAL NO:

In Re Application of: BRUNHEROTO, et al.

Confirmation No. 9149

Serial No.: 09/602,278

Filed: June 23, 2000

Title: METHOD AND SYSTEM FOR AUTOMATED MONITORING OF QUALITY
OF SERVICE OF DIGITAL VIDEO MATERIAL DISTRIBUTION AND PLAY-
OUT

REPLY BRIEF ON APPEAL

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In Re Application of:

Date: August 11, 2005

BRUNHEROTO, et al.

Confirmation No. 9149

Serial No.: 09/602,278

Group Art Unit: 2611

Filed: June 23, 2000

Examiner: Saltarelli, Dominic

For: METHOD AND SYSTEM FOR AUTOMATED MONITORING OF
QUALITY OF SERVICE OF DIGITAL VIDEO MATERIAL
DISTRIBUTION AND PLAY-OUT

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF ON APPEAL

Pursuant to 37 CFR 1.193(b)(1), Applicant responds to the new points raised in the Examiner's Answer mailed June 15, 2005, as follows:

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the Appeal Brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences is contained in the Appeal Brief.

(3) Status of Claims

A statement identifying the status of the claims is contained in the Appeal Brief.

(4) Status of Amendments

A statement identifying the status of amendments is contained in the Appeal Brief.

(5) Summary of Claimed Subject Matter

A summary of the claimed subject matter is contained in the Appeal Brief.

(6) Grounds of Rejection to be Reviewed on Appeal

A statement identifying the grounds of rejection to be reviewed on appeal is contained in the Appeal Brief.

(7) Response to Examiner's Answer

A. Examiner's Answer Page 3, Section 10

The Examiner states that “[i]n response to applicant’s arguments against the Iggulden reference individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.”

However, to establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488, 20USPQ2d 1438 (Fed. Cir. 1991).

- i. Copriviza Fails To Disclose Using a Hashing Algorithm To Produce A Signature That is Embedded Within Each Frame of the Video Program Material*

Copriviza discloses a system for monitoring the broadcast of video program material. To this end, Copriviza’s system includes an encoding means that continuously encodes each contiguous frame of a video tape. Accordingly, each and every frame of the

video program material is numbered or otherwise uniquely identified (col. 3, line 63 – col. 4, line 12). However, as acknowledged by the Examiner in point 2 of the Final Action mailed June 7, 2004, Copriviza fails to disclose using a hashing algorithm to produce a signature that is embedded within each frame of the video program material during encoding.

ii. *Iggulden Fails To Disclose Using a Hashing Algorithm To Produce A Signature That is Embedded Within Each Frame of the Video Program Material During Encoding*

Iggulden discloses a system for muting selected broadcast segments in real-time, such as commercials. Accordingly, a signature pattern associated with a broadcast segment is detected and compared to stored signature patterns, and if the detected signature pattern matches one of the stored signature patterns, the broadcast segment is processed in real-time to mute audio and video portions of the television signal during the broadcast segment (see Abstract).

Iggulden discloses two methods for determining a signature pattern of a broadcast segment.

Iggulden's first method for determining a signature pattern is to determine whether the average luminance level of a test line (of a test frame) exceeds a pre-determined threshold. Iggulden's system assigns a bit value of "1" to each line exceeding the threshold and a bit value of "0" otherwise. The bit values are then concatenated together yielding a single binary bit string hash code signature (col. 18, ll. 19-41).

Iggulden's second method for determining a signature pattern is to base the signature pattern on selected bits within one or more selected digital frames (col. 19, ll. 12-16).

Applicant respectfully submits that Iggulden (as with Copriviza) fails to teach or suggest using a hashing algorithm to produce a signature that is embedded within each frame of video program material during encoding.

First, while Iggulden discloses identifying a video frame using a hash code signature (as acknowledged by the Examiner), Iggulden nevertheless fails to disclose using a hashing algorithm to produce a signature that is embedded within each frame of the video program material (emphasis added). That is, after Iggulden's hash code signatures are determined, the hash code signatures are not embedded within each frame – or any frame – of a broadcast segment. Consequently, Iggulden's system requires that a signature of a given broadcast segment be re-identified (using one of the methods described above) each time the broadcast segment is encountered (col. 16, ll. 27-32).

Second, Iggulden fails to disclose using a hash algorithm to produce a signature during encoding (emphasis added). Instead, as discussed above and as noted in Applicant's arguments presented on page 8, lines 3-15 of the Appeal Brief, Iggulden determines a hash code signature in real-time, as a broadcast segment is received.

iii. *Echeita Fails To Disclose Using a Hashing Algorithm To Produce A Signature That is Embedded Within Each Frame of the Video Program Material During Encoding*

The Examiner does not cite Echeita as disclosing using a hashing algorithm to produce a signature that is embedded within each frame of the video program material during encoding. Nevertheless, Echeita (as with Copriviza and Iggulden) fails to disclose using a hashing algorithm to produce a signature that is embedded within each frame of the video program material during encoding.

iv. *The claim has limitations not taught by either reference*

As discussed above, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.

Neither Copriviza, Iggulden nor Echeita (either alone or in combination) discloses using a hashing algorithm to produce a signature that is embedded within each frame of the video program material during encoding. Consequently, the combination of Copriviza, Iggulden and Echeita cannot render claim 2 obvious, and the Examiner has not made a *prima facie* showing of obviousness.

v. *No Reasonable Expectation of Success*

The prior art can be modified or combined to reject claims as *prima facie* obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

As discussed above, Iggulden's system determines a hash code signature in real-time – i.e., as a broadcast segment is received. In contrast, claim 2 requires using a

hash algorithm to produce a signature during encoding (emphasis added). Applicant respectfully submits that even if Copriviza's system were modified to include hash code signature determination features associated with Iggulden's system – because Iggulden only determines a hash code signature as a broadcast segment is received – then the combination of Copriviza and Iggulden will not yield a system that utilizes a hashing algorithm to produce a signature that is embedded within each frame of the video program material during encoding. Instead, the combination of Copriviza and Iggulden will produce a system that includes an encoding means that continuously encodes each contiguous frame of a video program material, and subsequently, only when the video program material is received by a receiver will a hash code signature be determined for a given frame of the video program material. Consequently, there can be no reasonable expectation of success when combining Copriviza and Iggulden.

Conclusion


Neither Copriviza, Iggulden nor Echeita discloses using a hashing algorithm to produce a signature that is embedded within each frame of the video program material during encoding. Applicant, therefore, respectfully submits that the pending claims 2-24 and 26-29 are not properly rejected under § 103.

For these reasons, and the reasons stated in the Appeal Brief, Applicant submits that the final rejection should be reversed.

Please apply any charges or credits to Deposit Account No. 09-0460 (IBM Corporation).

Respectfully submitted,
SAWYER LAW GROUP LLP

August 11, 2005



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